REMARKS

Claim 13 has been amended to recite "at least one output shaft", thereby obviating the first drawing objection.

Proposed figures 1 and 2 are attached. The modified construction has been relegated to figure 2. The oil pump and controller, recited in claim 3, are now shown in figure 1.

Claims 1-13 stand rejected under 35 USC §112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to make and/or use the invention. The examiner bases this rejection on definition of "planetary gear arrangement" which is not broad enough to cover the term "planetary transmission stage" as disclosed by applicants. This rejection is traversed for the reasons following.

First of all, patent law allows the inventor to be his own exicographer. See, Autogiro Co. of America v. United States, 155 USPQ 2d 697,702 (Ct. Cl. 1967). A patentee can choose his own terms and use them as he wishes so long as he remains consistent in their use and makes their meaning reasonably clear. Ellipse Corp. v. Ford Motor Co., 171 USPQ 513,515 (7th Cir. 1971). 35 USC § 112 requires the specification to describe the manner and process of making and using invention so that any person skilled in the art may utilize it. In serving its statutory purpose, the specification aids in ascertaining the scope and meaning of the language employed in the claims inasmuch as words must be used the same way in both the claims and the specification. 37 CFR §1.75 (d)(1).

In the present case, applicants have described the invention in terms consistent with terms used in the claims, and have absolutely enabled one skilled in the art to make and use the invention. The fact that the examiner may have found a definition with differs from the way

the applicants have used a term in no way detracts from compliance with 35 USC §112, first paragraph.

A fundamental principle of 35 USC §112, second paragraph, is that applicants are their own lexicographers. They can define in the claims what they regard as their invention essentially in whatever terms they choose so long as the terms are not used in ways that are contrary to accepted meanings in the art. See MPEP 2173.02.

In the present case applicants have used the term "planetary transmission" broadly enough to cover planetary gears on fixed axes, which is clearly disclosed in the specification and drawings. The specification has been amended in this regard to use explicit language in order to support newly added claims. However such language is not "contrary" to accepted meanings in the art; it is consistent with language used in the art. See, e.g., JP 07-229471 (of record), which discloses a "planetary roller type ring" 10, a "planetary roller" 11 on a fixed shaft, and a "solar shaft" 9. The terms inherent in a planetary gear arrangement are used in a system similar to applicants', i.e., having planetary gears on fixed position shafts.

It is noted that U.S. 6,420,808 uses the term "multi-stage epicyclic gearing arrangement" to describe a system having planet wheels on fixed shafts. However, the term "epicyclic" refers to the movement of a point on a planet wheel whose axis is moving in a circle about a sun axis, which does not correctly describe the movement of a point on a planet wheel whose axis is not moving in a circle about a sun axis.

Finally, it will be noted that definitions can be found which are broad enough to encompass the transmission disclosed by applicants. For example, the American Heritage Dictionary defines a planetary gear train as "consisting of a central gear with an internal ring gear

and one or more pinions". It says nothing about the axes of the pinions rotating around the central gear.

In sum, applicants have used the term "planetary transmission stage" broadly enough to encompass an arrangement of a rotor driven ring gear, and planet wheels on fixed axes which drive a central sun gear. While not consistent with the narrow definition proffered by the examiner, it is not contrary to accepted meanings. Rather, it is consistent with accepted usage and within broader definitions. The application is in full compliance with 35 USC §112, first and second paragraphs.

Claim 8 has been amended to address the rejection under 35 USC §112, second paragraph.

Claims 1-2, 4, 7 and 10 stand rejected under 35 USC §102 as being anticipated by JP 07-229471. To the extent that this rejection would be applied to claim 1 as presently amended, it is traversed for the reason following.

JP '471 discloses a rotor 4 which *may* be supported *in* a housing, but there is nothing to suggest that it is supported *by* a housing. Likewise the rotor drives planetary gears which may be supported *in* a housing, but there is nothing to suggest that they are supported by the same housing which supports the rotor. This is the fundamental principal of the invention, and permits a compact structure wherein the rotor is supported in the transmission.

Claims 3, 5, 6, 8, 9 and 11-13 stand rejected as obvious in view of various secondary references. However none of these references suggests supporting the rotor and the planetary gears in a common housing. Thus, they add nothing to JP '471 toward rendering the claimed invention obvious.

Newly added claims define still further over the art of record. In particular, claims 15-17 recite a rotor having a conical shape supported in the housing by an outer bearing and an inner bearing. The importance of this feature is discussed at page 8, lines 6-11.

The claims as amended being definite and clearly patentable over the art of record, withdrawal of the rejections and early allowance are solicited. Should any objections remain, a call to the undersigned is requested.

It is believed that no fees or charges are required at this time in connection with the present application; however, if any fees or charges are required at this time, they may be charged to our Patent and Trademark Office Deposit Account No. 03-2412.

Respectfully submitted,

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AMENDMENTS TO THE SPECIFICATION AND CLAIMS SHOWING CHANGES

IN THE SPECIFICATION:

Page 2, please amend the paragraph starting at line 6 as follows:

DE 199 17 605, to which U.S. [Serial No. 09/552,113] Patent No. 6,420,808 corresponds, shows a shaft-mounted transmission for wind generators. This transmission is mounted on a rotor shaft supported in the tower of a wind power plant and is supported on the shaft via two bearings. The transmission housing is attached to the tower of the plant by means of torque arms.

Page 5, please amend the paragraph starting at line 2 as follows:

[The sole figure] Figure 1 is a section view of a transmission according to an exemplary embodiment[.]; and

Page 5, please insert the following new paragraph at end of page:

Figure 2 is a partial section view of a second exemplary embodiment.

Page 6, please amend the two paragraphs starting at line 6 as follows:

The rotary motion produced by the wind is transmitted by the rotor head (11), which carries the blades (12), to a rotor (10). The rotor head (11) is preferably bolted to the rotor (10), but it is also possible to produce the two parts in one piece. The rotor (10) is supported by the housing (3, 8) and mounted rotatably in the housing (3, 8) and [is] provided with an annular gear carrier (7).

The annular gear carrier (7) accommodates the annular gear (6), which transmits the power to one or more planetary gears (5). Each planetary gear (5) is fixed on a respective shaft which is supported by the housing (3) and rotatably mounted at a fixed position in the housing (3). Arranged in an axially offset position on the latter's shafts rotatably mounted in the housing (3) there is in each case a further planetary gear (2), which meshes with a sun gear (16). From the sun gear (16), which is cantilever-mounted in a centered manner between the planetary gears (2), the power is passed via a hollow-bored sun gear shaft (17) to a hub (19), which is preferably internally toothed and is in form-locking engagement with external toothing on the sun gear shaft (17) in such a way as to allow angular movement. The hub (19) carries a spur gear (20), which meshes with a pinion (22) that is preferably cut directly into the output shaft (21). From the output shaft (21), the driving power is passed directly or indirectly into the generator.

Page 7, please amend the paragraph starting at line 19 and continuing on page 8 as follows:

The rotor (10) is preferably guided by two sliding-contact bearings (9, 15), one bearing (15) being situated at one end of the rotor, within the transmission, and being secured on the main body of the housing (3). The other bearing (9) supports the rotor (10) at the end adjacent to the rotor head (11) and is secured on a transmission cover (8, 8'). At this point, at which the rotor (10) emerges from the transmission (1), a sealing ring (not indicated by a specific reference numeral) is provided. [On] In the exemplary embodiment illustrated, the outer bearing [(15)] (9) is embodied as a collar bearing and can also absorb axial forces. The inner bearing (15) is provided as a floating bearing. Other design embodiments to absorb the axial forces are also possible. The bearings (9, 15) can also be embodied as rolling-contact bearings, for example.

Page 8, please amend the paragraph on line 12 as follows:

Both bearings (9, 15) are embodied as hydrostatic sliding-contact bearings, which can be supplied with oil by a pump [(not shown)] (30) and thus have hydrostatic start-up properties. To start up the system, the bearings (9, 15) are raised hydrostatically by operating the electric pump with power from the network connected. As the speed of the rotor (10) increases, the oil pump can be controlled by means of a control and regulating unit (32) and the oil delivery pressure can be deliberately reduced or switched off. This enables the bearings (9, 15) to be supplied selectively on an individual basis with the required quantity of lubricating oil or the required oil pressure. It is thus possible to establish operating conditions in which the oil pressure in the lubricating gap is built up in part hydrodynamically and in part hydrostatically or in a purely hydrodynamic manner.

Page 9, please amend the paragraph on line 6 as follows:

Another embodiment is illustrated in [the lower half of the figure] Figure 2. In this variant, the annular gear carrier (7') is mounted as a separate part on the rotor (10). Here, the joint can be made by form locking, e.g. by means of a multi-groove or splined profile, or by force locking, e.g. by means of a press/shrink fit, a shrink fitting disc or a conical seat. Combinations of form- and force-locking, e.g. keys and shrink fitting of the cylindrical shaft/hub surfaces, are also conceivable. Where the annular gear carrier (7') and the rotor (10) are assembled, the housing cover (8') can be of one-piece design.

IN THE CLAIMS:

Claims 1, 8, and 13 are amended as follows:

1. (Amended) A transmission for a wind generator, the transmission comprising

a housing,

a rotor supported by said housing and rotatably mounted in said housing,

a multi-stage planetary transmission stage driven by said rotor, said stage comprising gears which are rotatably mounted in said housing, and

a spur gear stage driven by said multi-stage planetary transmission stage, said spur gear stage [driving] being arranged to drive at least one generator.

8. (Amended) A transmission as in claim 1 further comprising

a bearing [cover] housing secured to said housing, and

bearings for said spur gear stage supported in said bearing housing.

13. (Amended) A transmission as in claim 1 further comprising

a flanged housing surrounding said spur gear stage, and

at least [two] one output [shafts] shaft arranged in said flanged housing [and] for driving a respective [generators] generator, each said output shaft having a pinion gear which engages said spur gear stage.